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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,815	11/24/2003	Jeong-Wook Seo	46049	3442
7590	09/03/2009		EXAMINER	
Peter L. Kendall Roylance, Abrams, Berdo & Goodman, L.L.P. Suite 600 1300 19th Street, N.W. Washington, DC 20036			NEGRON, WANDA M	
			ART UNIT	PAPER NUMBER
			2622	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/718,815	SEO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	WANDA M. NEGRON	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 26 May 2009.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 and 21-29 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 14,15 and 18-20 is/are rejected.
- 7) Claim(s) 16 and 17 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____ .	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### ***Response to Arguments***

Applicant's arguments filed on 5/29/2009 have been fully considered but they are not persuasive.

Applicant asserts on pages 21 and 24 that the reference to Anderson does not teach coding the captured image signals into image data units based upon a frame size in a combined signal storing mode. However, the examiner maintains that performing a JPEG coding operation on a one-frame, *e.g.* still, image (*i.e.*, generating JPEG data 464') is considered performing a coding operation on the image. It is further noted that the specification as filed supports the above position by the examiner in that the coding operation performed is a JPEG coding operation (see Applicant' specification as filed, page 20, lines 26-31).

Applicant further asserts on pages 21 and 22 that Anderson does not disclose coding audio signals into audio data units according to the image units. However, it is the examiner's position that Anderson clearly discloses coding audio signals into audio data units according to the image units, *i.e.*, recording digital sound data associated to JPEG 464' in sound field 474; see figure 9 and col. 7, lines 4-12.

In addition, Applicant alleges on page 22 that Anderson does not disclose combining the image data units and audio data units, and storing combined data units in the memory. However, it is the examiner's position that Anderson discloses combining the image data units and audio data units, *i.e.*, generating an expanded file including sound field 474 and JPEG 464' (see figure 9 and col. 7, lines 4-12), and storing

combined data units in the memory (*i.e.*, storing the expanded file in an inherent memory device, *e.g.*, memory 354 for storing image data; see col. 3, lines 60-67).

Applicant further alleges on page 22 that Anderson does not disclose accessing selected combined data, separating the image and audio units via the image headers, and decoding and reproducing the image and audio data units. However, the examiner maintains that Anderson discloses accessing selected combined data, separating the image and audio units via the image headers, and decoding and reproducing the image and audio data units. More specifically, Anderson discloses that, after selecting one of the displaying cells 420, the expanded file 470 is accessed and the image data (which is conventionally generated from a JPEG image file using the JPEG header/markers) is fully displayed while the sound is played (see col. 7, lines 5-12).

It is further noted that the common knowledge or well-known in the art statements of the previous Office action are taken to be admitted prior art because applicant failed to traverse the examiner's assertion of official notice.

For the foregoing reasons, the rejection is still deemed proper and has been maintained.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 14 recites in steps (c) and (d) the limitation “plurality of combined data units”. However, in step (c) said limitation refers to “displayed information of a moving picture menu”, and in step (d) said limitation refers to “displayed information of a combined signal menu”. It is unclear if “a moving picture menu” and “a combined signal menu” refer to the same menu, or if the “plurality of combined data units” in step (c) are different from the “plurality of combined data units” in step (d).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US Patent No. 5,903,309) in view of Nakabayashi (US Patent No. 5,550,593).**

Regarding **claim 14**, Anderson discloses a method for processing image signals in a mobile terminal equipped with a camera and an image codec (*i.e.*, a digital camera 110 comprising imaging device 114 and an inherent image codec in order to generate JPEG data 464'), comprising the steps: (a) displaying image signals received from the camera in a capture mode (see col. 4, lines 56-67), coding each of the displayed image signals into still pictures in a photo capture mode (*i.e.*, generating JPEG data 464'), and

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storing the still pictures in a memory (see col. 3, lines 58-67); (b) coding the captured image signals from the camera into image data units based upon a frame size in a combined signal storing mode (*i.e.*, generating JPEG data 464' based on a frame size since only one image frame is coded) being performed according to a user's request (*i.e.*, using a capture button to capture the image to be coded and displayed; see col. 3, lines 3, *et seq.*), coding audio signals into audio data units according to the image data units (*i.e.*, recording digital sound data corresponding to image data 464'; see col. 7, lines 4-12), generating each of the image headers for combining the image data units and the coded audio data units (*i.e.*, generating and adding header 462'), combining the image headers, the image data units and audio data units (*i.e.*, including the digital sound data in sound field 474 corresponding to header 462' and image data 464'; see figure 9 and col. 7, lines 4-12), and storing combined data units in the memory (storing combined file 470 in memory 354); (c) in response to a request to view a combined data signal, displaying a plurality of combined data units, which are displayed information of a moving picture menu, stored in the memory (*i.e.*, when in a review mode, displaying cells 420 representing images captured and any associated tags and audio including movie clips; see figures 5 and 7, and col. 6, line 45 *et seq.*), accessing selected combined data, separating the image and audio data units via the image headers, and decoding and reproducing the image and audio data units (*i.e.*, after selecting one of the displaying cells 420, the expanded file 470 is accessed and the image data (which is conventionally generated from an JPEG image file using the JPEG header/markers) is fully displayed while the sound is played; see col. 7, lines 5-12). Anderson also

discloses displaying the plurality of combined data units stored in the memory (*i.e.*, displaying cells 420 representing images captured and any associated tags and audio; see figure 5 and col. 6, line 45 *et seq.*), and accessing selected combined data (*i.e.*, after selecting one of the displaying cells 420, the expanded file 470 is accessed; see col. 7, lines 5-12).

Anderson however does not explicitly disclose the step of assembling transmission packets based upon a selected combined data in response to a request to transmit combined data, and transmitting the assembled transmission packets; and a combined signal reception mode comprising the step of disassembling received packet data, combining image and audio data and storing a result of the combining in the memory.

The concept of an imaging system comprising a combined signal transmission mode and a combined signal reception mode for transmitting/receiving data packets including image and audio data is well known in the relevant art, as evidenced by Nakabayashi (see figures 6-8 and col. 7, line 60 *et seq.*). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to try to implement the transmitting/receiving capabilities taught by Nakabayashi in the invention disclosed by Anderson since a person with ordinary skill has good reason to pursue the known options within his or her technical grasp if this leads to an anticipated result, *i.e.*, a digital camera with the capability of transmitting and receiving combined image data.

**Claims 15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US Patent No. 5,903,309) in view of Lee et al. (US Application Publication No. 2002/0062313), hereinafter referred to as Lee, and further in view of Kaku (US Patent No. 6,728,471).**

Regarding **claim 15**, Anderson discloses a method for generating a combined signal (see figure 9) in a mobile terminal equipped with a camera and an image codec (*i.e.*, a digital camera 110 comprising imaging device 114 and an inherent image codec in order to generate JPEG data 464'), comprising the steps of: (a) coding each of one or more image signals captured by the camera into still pictures based upon a frame size via the image codec (*i.e.*, generating JPEG data 464') and inserting an image header 462' into each of the coded image signals; (b) after generating the picture signals, generating at least one text signal (*i.e.*, text in info. Field 472; see figure 9 and col. 6, lines 61-64); (c) combining the picture signals with a text signal (see figure 9); and (d) storing a combined signal representative of a result of the combining in a memory (*i.e.*, storing the expanded file 470 in removable memory 354).

Anderson, however, does not explicitly disclose that the image header contains image pattern information and frame size information, and generating moving picture signals based on the coded image signals.

The concept of storing image pattern information (*i.e.*, information indicating the image codec type of the still pictures) and frame size information (*i.e.*, screen size information) in the header portion of a file is well known in the art, as evidenced by Lee (see figure 1). It would have been obvious to one having ordinary skill in the art at the

time the invention was made to include image pattern information and frame size information in the image header in order to properly decode and display the image data.

In addition, the concept of generating moving picture signals based on coded image signals (*i.e.*, creating a motion image file by successive JPEG compression of still image data) is well known in the art, as evidenced by Kaku (see col. 3, lines 1-16). It would have been obvious to one having ordinary skill in the art at the time the invention was made to try to generate moving picture signals based on the coded image signals since a person with ordinary skill has good reason to pursue the known options within his or her technical grasp if this leads to an anticipated result, *i.e.*, generating a motion JPEG image file.

Regarding **claim 18**, Anderson in view of Lee and Kaku discloses that the step (a) comprises the steps of: (a-1) compressing and coding the image signals based upon the frame size (*i.e.*, generating JPEG data 464'; see Anderson); (a-2) generating the image header containing information indicating a size of each compressed and coded image signal and an image pattern signal (see 462' in Anderson and Lee, figure 1); (a-3) inserting the image header into each compressed and coded image signal and generating a still picture signal based upon the frame size (see 464' in figure 9 of Anderson); and (a-4) repeating an operation for generating the still picture signal and generating the moving picture signals (see Kaku, lines 1-16).

Regarding **claim 19**, Anderson in view of Lee and Kaku discloses that the compressed and coded image signals are Joint Photographic Expert Group (JPEG) coded image signals (see 464' in figure 9 of Anderson).

Regarding **claim 20**, official notice is taken that the concept of registering an image file name and a place and time of image capture associated with said file is old and well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to register a name of the combined signal and a place and time of image capture associated with the combined signal because the user is able to store the image file using a preferred filename for quick file retrieval, and to store associated information for future reference.

#### ***Allowable Subject Matter***

**Claims 16 and 17** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding **claims 16 and 17**, the relevant prior art fails to disclose or reasonably suggest that the step (b) of parent claim 15 comprises the steps of: (b-1) ***deciding maximum length of displayable text according to a playback time required for reproducing the obtained moving picture signals and displaying the reproduced***

***moving picture signals;*** (b-2) generating a text header containing information indicating a size of the received text signal and a text pattern signal; and (b-3) inserting the text header into the text signal and generating the text signal having the inserted text header.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WANDA M. NEGRON whose telephone number is (571)270-1129. The examiner can normally be reached on Mon-Fri 9:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wanda M. Negrón/  
Examiner, Art Unit 2622  
August 31, 2009

/JOHN M. VILLECCO/  
Primary Examiner, Art Unit 2622  
August 31, 2009